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Patent Number: CA2160659 A1 19941124

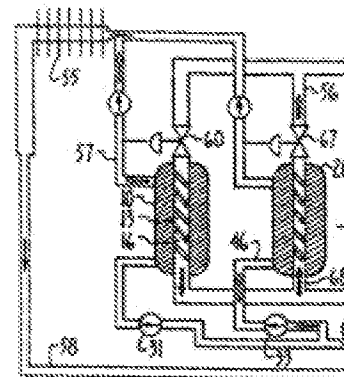
## IMPROVED HEAT TRANSFER APPARATUS AND METHODS FOR SOLID-VAPOR SORPTION SYSTEMS

(EP-697085)

## WÄRMEÜBERTRAGUNGSVORRICHTUNG UND VERFAHREN FÜR FESTSTOFF-DAMPF-SORPTIONSANLAGEN

(WO9427098)

In a sorption reaction system comprising one or more first reactors (10) in which a refrigerant is alternately adsorbed and desorbed, and one or more second reactors (20) in which a refrigerant is alternately desorbed and adsorbed, respectively, and having a cooling loop (16, 60, 68, 67, 56, 12, 21) for directing heat transfer fluid to and from said reactors (10, 20), a method of cooling an adsorbing reactor comprises directing liquid phase heat transfer fluid having a phase change from liquid to gas at a temperature at or below the temperature of adsorption to an adsorbing reactor in heat exchange exposure to the adsorbent utilizing vaporized heat transfer fluid for driving the liquid heat transfer fluid in the cooling loop. The refrigerant may be used as the heat transfer fluid. The invention includes apparatus for carrying out the method.



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














































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89005 (US)

### FamPat family

Publication Number	Kind	Publication date	Links
CA2160659	A1	19941124	
STG:	Application laid open		
AP :	1994CA-2160659 19940420		
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STG:	Publ. Of int. Appl. With int. Search rep		
AP :	1994WO-US04343 19940420		
AU6709094	A	19941212	
STG:	Open to public inspection		
AP :	1994AU-0067090 19940420		
HU9503185	D0	19951228	
STG:	Filing application		
AP :	1995HU-0003185 19940420		
BR9406573	A	19960130	
STG:	Patent Application		
AP :	1994BR-0006573 19940420		
EP0697085	A1	19960221	
STG:	Public. Of applic. With search report		
AP :	1994EP-0914851 19940420		
CN1123053	A	19960522	

STG:	Unexamined application	   
AP :	1994CN-0192065	
	19940420	
HU73008	A2 19960628	  
STG:	Examined patent application	
CZ9502850	A3 19960814	  
STG:	Application for patent	
AP :	1995CZ-0002850	
	19940420	
JP8510045	T 19961022	  
STG:	Unexam. Pat. Appl. On foreign appl.	
AP :	1994JP-0525445	
	19940420	
SG47748	A1 19980417	  
STG:	Patent Application	
AP :	1996SG-0004165	
	19940420	
EP0697085	B1 19990901	   
STG:	Patent	
AT184098	T 19990915	  
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AP :	1994AT-0914851	
	19940420	
DE69420404	D1 19991007	  
STG:	Granted EP number in bulletin	
AP :	1994DE-6020404	
	19940420	
RU2142101	C1 19991127	  
STG:	Patent for invention	
AP :	1995RU-0120603	
	19940420	
ES2137365	T3 19991216	  
STG:	Translation of granted European patent (former B3)	
AP :	1994ES-0914851	
	19940420	
DE69420404	T2 20000210	  
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HU219393	B 20010328	  
STG:	Patent with search report	
CN1099563	C 20030122	   
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JP3391795	B2 20030331	  
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CA2160659	C 20060711	   
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